BEFORE THE PUBLIC SERVICE COMMISSION OF WISCONSIN

Application of Wisconsin Public Service Corporation for Authority to Adjust Electric and Natural Gas Rates

Docket No. 6690-UR-127

INITIAL BRIEF OF THE CITIZENS UTILITY BOARD

I. INTRODUCTION

This proceeding considers the Application of Wisconsin Public Service Corporation ("WPSC," "Applicant," or "the Company") to adjust customers' electric and natural gas rates for the 2023 test year. WPSC serves approximately 463,000 electric customers, roughly 399,000 of them residential (Ex.-WPSC-Stasik 1: Schedule 1 p. 4 of 5), and 340,000 natural gas customers, 305,000 of them residential. (Ex.-WPSC-Korducki-01). There is some overlaps between these Company's electric and natural gas customers.

In the application filed April 28, 2022, the Company proposed an overall retail electric rate increase of 6.5% (Direct-WPSC-Nelson-5), with a residential rate (Rg-1) increase of 5.93% (*Id.* at 6) or roughly \$5.96/month for the average residential customer. (Ex.-WPSC-Nelson-3: Schedule 1 p. 1 of 2) Company-stated goals of this electric revenue allocation include "gradualism," "stability," "temper[ing] increases to individual rate classes," (Direct-WPSC-Nelson-5). The original revenue allocation limited the rate increase to residential customers. (Direct-WPSC-Nelson; *see also* Tr. 144: 9-20) The Company also proposed a natural gas rate increase for the average residential customer of 5.78% (Ex.-WPSC-Korducki-4r) or \$3.35/month. (*Id.*) Projected increases in natural gas prices would be in addition to this proposed base increase. (*See* Direct-WPSC-Stasik-r) With respect to natural gas rate design, the

Company's witness explained "in designing gas rates, we apply the same principles described in the electric rate design testimony of my colleague, Mr. Aaron Nelson, and emphasize in particular avoidance of rate shock." (Direct-WPSC-Korducki-r-3)

In Surrebuttal testimony filed on September 30, 2022, the Company changed its position, instead supporting an electric revenue allocation with an average residential increase of 11.04% (Surrebuttal-WPSC-Nelson-4), or nearly double the originally proposed electric increase, citing a need to adjust for "deteriorating economic conditions facing Wisconsin since that [April 28th] filing." (Surrebuttal-WPSC-Nelson-3)

CUB intervened in this proceeding on May 10, 2022 and was made a party to it on July 13, 2022.¹

Following negotiations, Applicant filed a proposed settlement agreement.² CUB is among the parties that has agreed to the *Proposed Settlement*. From CUB's perspective the *Proposed Settlement* disposes of some of CUB's contested issues related to revenue requirement and rate design. Specifically, it lowers the monthly electric residential and small commercial customer charge from \$21 to \$19; commits Applicants to working with CUB and other interested parties to explore and develop affordability rate programs, including a percentage of income payment plan; and commits Applicants to work with CUB, RENEW Wisconsin, and other interested parties in to develop a Bring Your Own Device (BYOD) demand response pilot. (*Proposed Settlement* at 5-6) Issues that fall outside of those explicitly resolved by the Proposed Settlement are to be addressed by the Commission.

¹ Order on Requests to Intervene, July 13, 2022 (PSC REF#: 442570).

² Application for Approval of Settlement Agreement, Oct. 3, 2022 (PSC REF#: 448649) ("Proposed Settlement").

This proceeding comes at a time of high inflation. As discussed further in this brief, the macroeconomic climate spares no person or entity. A typical customer comment among the several dozen electronically-filed comments in this docket so far reads:

People are struggling to make ends meet after having grocery, housing, gas, clothing, and all other necessities' prices skyrocketing over the past very few short years. We keep our thermostat turned down so far in winter we have to wear coats in the house and still our bills are astronomical. How is it possible anyone thinks it's a good idea to raise rates -- at this time in particular??" (*Public Comment by Julie Hathaway* (PSC Ref #448312))

Shifting all responsibility for macroeconomic conditions from the Company's investors to Wisconsin customers—customers who have already been burdened by excessive investor profits-would contravene long-held regulatory practices and fairness standards. The burden is on the Joint Applicants to show that the rates they seek to recover from customers are just and reasonable, cost-effective, and consistent with the public interest. The record contains no such evidence.

CUB recommends that, based on the record of evidence in this proceeding, the Commission find just and reasonable (1) an ROE of 9.0 to 9.1; (2) Applicants' originally-proposed electric revenue allocation, which properly considers economic stability for Wisconsin's residential customers; (3) WPSC's proposed rate design; and (4) Commission staff's proposed natural gas revenue allocation. As described in this brief, CUB's recommendations are consistent with the public interest in safe, reliable, and affordable public utility service.

II. WHEN DETERMINING A JUST AND REASONABLE ROE, THE COMMISSION'S PRIMARY DUTY IS TO THE CUSTOMERS OF WISCONSIN, NOT TO UTILITY INVESTORS SEEKING EXCESS PROFITS

"[T]he primary purpose of the public utility laws in this state is the protection of the consuming public." The Wisconsin Commission may only authorize rates if it determines, based on the record of evidence, that an applicant's requested charges are just and reasonable. A just and reasonable ROE balances investor and customer concerns. In *Bluefield* (1923), the Supreme Court broadly defined a range of IOU profits that neither undercompensates nor overcompensates the utility, holding that a public utility "has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures."

In *Natural Gas Pipeline* (1942), the Court more forcefully recognized customers in the balancing act, defining rates as just and reasonable only if the Commission considers "among other factors two phases of the public interest: (1) the investor interest; (2) the consumer interest." The Court clearly defined when the fairness analysis turns to consumers:

[I]f the rate permits the company to operate successfully and to attract capital all questions as to 'just and reasonable' are at an end so far as the investor interest is concerned. . One caveat however should be entered. *The consumer interest cannot be disregarded in determining what is a 'just and reasonable' rate*. 8 (emphasis supplied)

Consistent with *Hope*, *Bluefield*, and Wisconsin law, it is within this "zone of reasonableness," where rates are neither "less than compensatory" nor "excessive," that the Commission's discretionary technical decision-making lies. ⁹ Establishing the just and reasonable return on equity is not a mathematic problem but a matter of regulatory policy. ¹⁰

³ Wis. Environmental Decade v. Public Service Comm., 81 Wis.2d 344, 351, 260 N.W.2d 712 (1978) (citing Wisconsin Power & Light Co. v. Public Service Comm., 45 Wis.2d 253, 259, 172 N.W.2d 639 (1969).

⁴ Wis. Stat. § 196.03(1) (2019-20).

⁵ See, e.g., FPC v. Natural Gas Pipeline Co., 315 U.S. 575 (1942).

⁶ Bluefield Co. v. Pub. Serv. Comm., 262 U.S. 679, 692-293 (1923).

⁷ Natural Gas Pipeline Co., supra, 606-607.

⁸ *Id.* at 607.

⁹ See, e.g., Federal Power Commission v. Hope Natural Gas Co, 320 U.S. 591, 602-603 (1944); Mobil Oil Corps. v. FPC, 417 U.S. 283, 305-306, 316 (1974); Farmers Union Cent. Exchange, Inc. v. FERC, 734 F.22d 1486,1502-1503, 236 U.S. App. D.C. 203 (D.C. Cir. 1984).

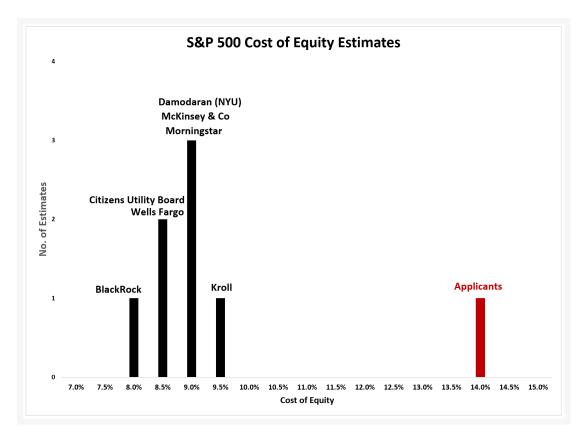
¹⁰ In re Permian Basin Area Rate Cases, 390 U.S. 747, 790 (1968); Hope, supra, 602.

The Commission cannot confine its inquiries either to the computation of costs of service or to conjectures about the prospective responses of the capital market; it is instead obliged at each step of its regulatory process to assess the requirements of the broad public interests entrusted to its protection..."¹¹

III. THE COMMISSION SHOULD DISREGARD THE COMPANY'S UNREASONABLE AND UNSUPPORTED ROE REQUEST

a. Differences between the parties' estimated costs of equity cannot be attributed to reasonable people disagreeing.

Applicants' analysis of cost of equity is not based on corporate finance principles and therefore is unreasonable. The following figure illustrates how out-of-bounds Joint Applicants' S&P 500 cost of equity estimate is compared to other credible sources' estimates. (Surrebuttal-CUB-Kihm-r-6; Direct-WPSC-Bulkley-40)



¹¹ Permian Basin, supra, 791.

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Overestimating the S&P 500 cost of equity, as Applicants have, leads to CAPM-based utility cost of equity estimates ranging from 11% to 13% (Direct-WPSC-Bulkley-5), well above average authorized ROEs for U.S. electric utilities over the past ten years (Ex.-PSC-Adams-2) If Applicants were correct in developing these estimates, utility stocks would trade below book value. (Direct-CUB-Kihm-r-19) They do not—the typical utility stock trades at about twice book value (Surrebuttal-CUB-Kihm-r-5), and WEC Energy Group trades at about three times book value (Direct-CUB-Kihm-r-75). The cost of equity estimates that were developed using finance principles include Dr. Kihm's DCF model results (Surrebuttal-CUB-Kihm-r-5) and CAPM results (*Id.* at 6), and Mr. Adams's two-stage DCF model analysis (Surrebuttal-PSC-Adams-2). The figures reported in these testimonies suggest that the cost of equity for Applicants is in the 6% to 8% range.

b. Applicants' flawed financial analysis of cost of equity leads the Commission astray and does not support their requested ROE.

CUB adheres to corporate finance and regulatory principles in developing distinct cost of equity and ROE estimates. Applicants do not. Applicants conflate key variables (Direct-WPSC-Bulkley-2), fail to follow corporate finance principles (Surrebuttal-WPSC-Bulkley-2), and even reject standards set forth by the United States Supreme Court (Sur-Surrebuttal-WPSC-Bulkley-2). In reviewing the record of evidence in this proceeding, the Commission must make a choice between a recommendation based on solid financial foundations (CUB) and one inconsistent with the very notions of modern corporate finance (Applicants).

These are the key points in CUB's evidence-based financial analysis that distinguish it from the Applicants':

1. ROE and the cost of equity are distinct concepts. (Direct-CUB-Kihm-r-28-29)

There are no ROE models in finance, only cost of equity models that are considered when determining the just and reasonable ROE. (*Id.* at 55)

2. The only time ROEs provide proper numeric estimates of investor return requirements (costs of equity) is in the rare instance when utility stock prices trade at book value. ¹³ (Direct-CUB-Kihm-r-43)

Utility stock prices have traded above book value for decades, meaning that utilities have consistently been authorized ROEs in excess of investor return requirements. (*Id.* at 44)

3. If the ROE is set equal to the cost of equity, the stock price is driven to book value, and there is no incentive for the utility to invest because investing does not create value for existing investors. ¹⁴ (Direct-CUB-Kihm-r-76)

There is no debate among finance experts as to whether this is true; the issue in this proceeding is whether the ROE should be set at this level. (*Id.* at 77) CUB agrees with regulatory economics experts that the properly estimated cost of equity forms the floor for the ROE determination. (*Id.* at 77)

4. Market pricing ensures that prospective investors will expect to earn the same return on utility stocks regardless of their ROEs. 15 (Direct-CUB-Kihm-r-16)
Utility stock prices illustrate this, as the stocks of utilities that earn higher ROEs are more expensive on a relative basis than those of utilities that earn lower ROEs. (Id. at 24)

5. The cost of equity reflects a utility's exposure only to macroeconomic risk factors (e.g., recessions). The influence of firm-specific risks, including risks of technological obsolescence and competition, are diversified away in portfolios and therefore have no bearing on the cost of equity. ¹⁶ (Direct-CUB-Kihm-r-40)

¹² Ezra Solomon, 1970, Alternative rate of return concepts and their implications for utility regulation, *Bell Journal of Economics and Management Science*.

¹³ FERC Decision in Docket No. ER16-2320-002, p. 112-113 (March 17, 2022).

¹⁴ Stephen Breyer, 1982, Regulation and Its Reform.

¹⁵ Alfred Kahn, 1970, The Economics of Regulation: Principles and Institutions.

¹⁶ Tim Koller, Marc Goedhart, and David Wessels, 2020, *Valuation: Measuring and Managing the Value of Companies*.

Foundational to cost of equity estimation is the recognition that the market participants who determine stock prices and costs of equity are sophisticated institutional investors. (*Id.* at 40)

6. Trust current (spot) market prices. All relevant information is already impounded in current stock and bond prices by sophisticated institutional investors, reflecting their return requirements.¹⁷ (Direct-CUB-Kihm-59,62)

To use averages of historical stock prices or forecasts of interest rates, or to suggest that model results need to be adjusted based on outside information, has been shown to decrease predictive accuracy of market-traded variables. (*Id.* at 55-62; Ex.-Kihm-CUB-1, Surrebuttal-CUB-Kihm-r-2-4)

7. That interest rates have risen recently means they are just as likely to decline as they are to rise going forward. (Direct-CUB-Kihm-r-57)

The random-walk (spot yield) model has for the past four decades been by far the most accurate predictor of future interest rates. (Ex.-Kihm-CUB-1)

8. No firm, utility or non-utility, can over the long run grow faster than the rate of growth in the economy, which is currently estimated to be about 4% per year. (Direct-CUB-Kihm-r-54)

The GDP growth rate puts a rational restriction on long-run growth estimates, ensuring that the resulting cost of equity estimates respect natural limits.

9. Stock market pricing ensures that utilities can raise capital at relatively low ROEs.²⁰ (Surrebuttal-CUB-Kihm-r-13) Duke Energy, the second largest utility in the U.S., raised billions of dollars of new capital over a decade at a median ROE of 7.0%. (Direct-CUB-

¹⁷ Richard A. Brealey, Stewart C. Myers, and Franklin Allen, 2006, *Principles of Corporate Finance*.

¹⁸ William Reichenstein, 2006, Rationality of Naive Forecasts of Long-Term Rates, *The Journal of Portfolio Management*.

¹⁹ Aswath Damodaran, 2011, *Applied Corporate Finance* and Leonard Hyman, 2003, Investing in the Plain Vanilla Utility, *Energy Law Journal*.

²⁰ Roger Morin, 2006, New Regulatory Finance.

Kihm-r-74) Commonwealth Edison earned an A bond rating from Fitch even though its ROEs have been in the 7% to 8% range for many years. (*Id.* at 75)

10. The final ROE determination is one of expert judgment, based on pragmatic adjustments, not mathematical models.²¹ (Direct-CUB-Kihm-r-33)

The Court provides clear direction here.

c. The Company's view of "negative outcomes" related to ROE determinations is entirely investor-centric and theoretical.

The Company offers no evidence that an ROE determination has ever impaired a utility's ability to attract capital or to provide safe, reliable, and affordable utility service. (Tr. 77-80) For purported evidence of "negative outcomes for utilities," the Company offered up four utilities that sustained credit downgrades, with one of the four, Arizona Public Service (APS), also seeing a decline in share prices. (*See* Rebuttal-WPSC-Bulkley-42-44). The Company's finance expert witness acknowledged she has not examined the cash flow statements of any of her four example utilities subsequent to their sustaining ROE reductions. (Tr. 80:17-20) In fact, APS's share price is \$69.38, well above its book value of \$52.27, meaning even now investors expect it to earn more than its cost of equity. (Surrebuttal-CUB-Kihm-r-13) There is a remarkable lack of evidence on the record in this proceeding regarding the investors' downside of an ROE reduction and overwhelming evidence of the upside for customers.

d. Flawed analyses leading to unjust and unreasonable ROEs have cost customers dearly.

Independent financial experts have criticized regulators for applying internally inconsistent and unsubstantiated financial methods to determine ROEs. (Direct-CUB-Kihm-r-45) For example, MIT finance professor Stewart Myers and Brattle Group economist Lynda Borucki

²¹ Hope, supra.

noted the expectation of unreasonably high market-to-book ratios that was baked into ROE decisions. (*Id.*) If regulators were setting ROEs at the cost of equity, utility stocks would trade at book value; instead, typical utility stocks trade at almost twice book level. (*Id.* at 70)

In many proceedings, applicants have used professional forecasts of interest rates, which are known to be inaccurate, to boost model results. (*Id.* at 57-60) This has inflated cost of equity estimates, which, when properly calculated, have been well below 10% for some time. (*Id.*) Twenty years of overinflated professional forecasts of interest rates have created 2200 basis points of excess returns for utilities. (Ex.-Kihm-CUB-1) This has cost customers dearly, to the tune of an estimated \$2 to \$8 billion in excess utility charges each year nationwide. (Direct-CUB-Kihm-r-45)

More Commissioners are beginning to recognize the flaws in an approach based on technically incorrect and outdated analyses. As FERC Chairman Richard Glick wrote:

The Commission must be transparent about the factors driving its decisionmaking process. If we think the ROEs set by the Commission's methodology are too low—or, for that matter, too high—we ought to say so and explain our reasoning, rather than pretending to be concerned only with the technical details of our models, data, and assumptions. (Surrebuttal-CUB-Kihm-r-11)

The traditional, internally inconsistent, and meritless approach, which Applicants propose in this case, leads the Commission away from, not toward, reasonable estimates of costs of equity and proper determinations of ROEs.²²

e. A bond rating downgrade would not offset the customer savings from an ROE reduction.

Applicants repeatedly state that a high ROE is necessary to support the Company's high credit rating. (*See, e.g.,* Direct-WPSC-Shipman-11-12, Rebuttal-WPSC-Bulkley-45-46) Further,

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²² To continue to use a once-accepted approach without evidence in support of its merit is the logical fallacy of "appeal to tradition." (Direct-CUB-Kihm-r-69)

they claim, with no evidence, that a decrease in authorized ROE might result in a credit downgrade that in turn might cost customers more than it saves them. (Rebuttal-WPSC-Bulkley-46) CUB presented evidence disproving the Company's claims that an authorized ROE reduction would hurt customers. (Direct-CUB-Kihm-r-80) CUB showed that, even using assumptions most favorable to Applicants' financial framework, an ROE reduction accompanied by a 100-basis point increase in Applicants' cost of debt would result in substantial savings for customers (Direct-CUB-Kihm-76-80). A 9.0% ROE in this proceeding would save WPSC customers up to \$26 million every year going forward.

f. Rational prospective investors will willingly provide capital without shareholder value because they expect to earn market returns, not excess returns.

CUB's financial expert noted that an ROE set equal to CUB's 6% to 7% cost of equity estimate creates no value for shareholders, consistent with the definition of market return. (Tr. 151:17-22) In response, the Company's witness conflated another set of distinct variables: (1) value created for existing investors, which is measured in dollars, and (2) the rate of return prospective investors expect to earn, which is expressed as a percentage. (Surrebuttal-WPSC-Bulkley-2) This reveals a lack of understanding of both shareholder value (a term that means value that flows from returns in excess of the cost of equity) and cost of equity. The cost of equity is the return investors expect to earn on a utility's stock, not what the utility earns. (Direct-CUB-Kihm-r-8) For prospective investors to decide to provide capital, they need only expect to earn the cost of equity; they do not need to expect shareholder value, and in fact market pricing will ensure that they do not earn shareholder value. (*Id.* at 16) Shareholder value accrues to existing investors, not prospective investors; new investors are content to provide capital earning the market return, i.e. no excess value. (*Id.* at 26) Attempting to create shareholder value in advance for prospective investors by raising the ROE is self-defeating because all it does is

raise the stock price and make the existing investors, those who do not supply new capital, wealthier. (*Id.* at 15).

IV. THE COMMISSION SHOULD AUTHORIZE AN ROE OF 9.0 to 9.1 PERCENT FOR WPSC

a. Cost of equity estimates provided by CUB, Clean Wisconsin, and Commission staff establish a range of reasonableness based on sound corporate finance principles.

Consistent with the above, it is appropriate for the Commission to base its estimate of the test year utility cost of equity on the cost of equity analyses performed by CUB, and Commission staff for WPSC.

WPSC			
Model	Staff ²³	CUB ²⁴	Average
DCF	7.97%	6.30%	7.14%
CAPM		7.80%	7.80%
Mean	7.97%	7.05%	7.47%

b. Disregarding their flawed cost of equity testimony, Applicants have provided no evidence in support of their requested ROE.

As already discussed, Applicants' cost of equity analysis is fatally flawed and should be disregarded. Considering the range of reasonable estimates provided by CUB, Clean Wisconsin, and Commission staff, Applicants' requested ROE for WPSC far exceeds the utility cost of equity. Specifically, Applicants' request ROE of 10.0 percent exceeds the reasonable cost of equity estimates by 203 to 370 basis points, or 253 basis points on average.

Applicants have provided no valid evidence to support an ROE in excess of the range of reasonably estimated utility costs of equity. (Direct-CUB-Singletary-r-23-25, Surrebuttal-CUB-Singletary-r-14,16) To the extent that Applicants' witness attempts to estimate the utility cost of

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²³ These are the figures reported in Ex.-PSC-Adams-2 for the 10-year two-stage DCF model, which the Citizens Utility Board supported (Rebuttal-CUB-Kihm-r-1-2)

²⁴ Surrebuttal-CUB-Kihm-r-7.

equity, their analytical methods are inconsistent with (1) mainstream finance principles broadly accepted by the academic and professional literature (Surrebuttal-CUB-Singletary-r-4-5) and (2) actual estimates of Applicants' cost of equity produced by independent third parties from within the broader corporate finance industry. (Surrebuttal-CUB-Kihm-r-6) The utility cost of equity estimates provided by CUB, and Commission staff delineate a range of reasonableness for the utility cost of equity.

The cost of equity specifically reflects the risk associated with macroeconomic factors such as inflation. That is why the cost of equity for utilities is 6% to 7%, not in the upper 3% area as it is for risk-free treasuries (Surrebuttal-CUB-Kihm-r-6). That Applicants experienced an inflation spike is one of the risks for which they already more than receive compensation, as their ROEs are well above not only the risk-free rate, but also the investors' required return (Surrebuttal-CUB-Kihm-r-7). Additionally, to the extent that the Commission concludes that inflation will increase Applicants' expenses or capital investment costs, 25 those increased costs should be reflected in the test year expense and plant forecast, not accounted for through an expost adjustment to the cost of equity that unreasonably inflates ROE. Simply put, Applicants have not met their burden of proof.

Applicants have also provided no valid evidence as to how their requested ROE fairly balances the interests of customers and shareholders, other than simple assertions that it does. (Surrebuttal-CUB-Singletary-r-14,16) To the extent that Applicants attempt to present financial arguments that their requested ROE balances customer and shareholder interests, that evidence is inconsistent with mainstream finance principles. (Direct-CUB-Kihm-r-51)

²⁵ Applicants are seeking force majeure increases related to Badger Hollow II, Paris Solar and Battery, and Red Barn Wind facilities. (Proposed Settlement: App. 1)

In light of the paucity of evidence from the Applicants, CUB recommends that the Commission authorize a test year ROE of 9.0 percent for WPSC. CUB's recommended test year ROE for Applicants is supported by the range of reasonableness for the utility cost of equity. It is reasonable from the perspective of prospective investors as it exceeds the reasonable estimates of the utility cost of equity and therefore more than satisfies the required return level for prospective utility investors. Reducing WPSC authorized ROE from 10.0 to 9.0 percent in this proceeding is reasonable as it is directionally consistent with both the range of appropriately estimated costs of equity and the lack of any evidence that WPSC's performance warrants a large return premium over the cost of equity. (Surrebuttal-CUB-Singletary-r-15) If the Commission believes that the performance difference between WPSC and Wisconsin Electric power Company (WEPCO) warrants such treatment, CUB would support an authorized ROE of 9.1 percent for WPSC in this proceeding as it is conceptually consistent with the just and reasonable standard. (Surrebuttal-CUB-Singletary-r-17)

If evidence supporting a premium ROE in excess of the cost of equity continues to be lacking, WPSC's ROE could be further driven towards the cost of equity in subsequent proceedings. (*Id.*) Conversely, if evidence were provided to the Commission that could allow it to find WPSC's performance in serving its customers to be deserving, the authorized ROE could be increased (*Id.*, Surrebuttal-CUB-Singletary-r-17-18), consistent with the just and reasonable standard set by the Supreme Court. Ultimately the Commission must determine whether the costs borne by customers from an incrementally higher ROE are commensurate with any incremental benefit received by customers. (Direct-CUB-Singletary-r-20)

c. While Applicants have provided no evidence to support a test year ROE in excess of the cost of equity, CUB has provided an example of the kind of

²⁶ Bluefield, supra; Natural Gas Pipeline Co., supra; Hope, supra.

performance evaluation that could be done in order to inform a Commission decision regarding final ROE.

CUB presented the results of a basic evaluation of WPSC's performance across a set of three different customer-focused metrics (Direct-CUB-Singletary-r-17-22): Customer electricity utility rates (Ex.-CUB-Singletary-2), Utility Reliability (Ex.-CUB-Singletary-3), and Customer satisfaction (Ex.-CUB-Singletary-4). Based on this review of a limited set of metrics, CUB characterizes WPSC's past performance as slightly better than average. (Direct-CUB-Singletary-r-18-20) Considering reliability, WPSC has performed well over the period examined relative to other Wisconsin utilities. (Direct-CUB-Singletary-r-18, Ex.-CUB-Singletary-3r) WPSC has also had a relatively low average cost of electricity along with a relatively low growth rates in those rates when compared against other Wisconsin utilities. However, Wisconsin overall ranks second highest in the region (Direct-CUB-Singletary-r-18, Ex.-CUB-Singletary-2) WPSC's customer service rankings have been good over the period examined when compared against its Wisconsin peers or Midwest utilities of comparable size. (Direct-CUB-Singletary-r-20, Ex.-CUB-Singletary-4)

CUB's performance metric analysis is presented as an illustration of how the Commission should award an authorized ROE. This analysis is not meant to be viewed as comprehensive. (Direct-CUB-Singletary-r-10, 21-22) It is up to the Commission to determine what evidence and evaluation criteria are important when setting a just and reasonable ROE. (Surrebuttal-CUB-Singletary-r-17) CUB's witness provides numerous examples of performance metrics that could be considered by the Commission in evaluating and setting utility ROE. (Direct-CUB-Singletary-r-10-12, Ex.-CUB-Singletary-1)

Regardless of what performance criteria the Commission uses to set a utility's ROE, what is critical is that the Commission: (Direct-CUB-Singletary-r-16)

- 1. Explicitly articulate what performance criteria it considered in arriving at an authorized ROE; and
- 2. Explicitly articulate how a utility's performance against those criteria affected the final authorized ROE.

These steps provide not just transparency but also a clear performance signal to the utility that affords it a reasonable opportunity to improve performance over time and thus earn a higher ROE.²⁷ Only through this process can we achieve the public policy goal, well-established in law, of balancing the interests of customers and utility shareholders within a zone of reasonableness. (*Id.*) Regulated utilities have known since at least *Hope*, that is for 84 years, of their burden to demonstrate to the satisfaction of commissioners that their requests are within the zone of reasonableness.²⁸ Given the current economic climate and the other significant cost drivers in this proceeding (Direct-PSC-Probst-5-13, Ex.-PSC-Probst-1 Schedule 5), CUB believes that it would be inappropriate to delay reducing WPSC's extraordinarily high ROEs.

To summarize, CUB recommends the Commission:

- Reaffirm the framework adopted by the Commission in Docket No. 3270-UR-115
 (Ex.-CUB-Kihm-4), consistent with just and reasonable standard, that identifies
 the cost of equity and return on equity as two distinct returns.
- 2. Adopt a set of quantitative approaches to estimating the utility cost of equity consistent with conventional corporate finance principles.
- 3. Explicitly reject the flawed methodology used by Applicants' witness to estimate the utility cost of equity.

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²⁷ For a recent example of this approach, see *In re Blue Granite Water Co.*, 434 S.C. 180, 862 S.E.2d 887 (Sept. 1, 2021) (affirming the South Carolina Commission's determination of a 7.46% ROE to incentivize Blue Granite to improve its business practices).

²⁸ *Hope, supra,* 602.

- 4. Exercise its discretion in awarding an ROE that (1) allows the utility to meet the investors' required return and (2) protects the interests of Wisconsin customers.
- 5. Authorized a test year 2023 return on equity for WPSC of 9.0 to 9.1 percent.
- 6. Specify a set of key performance areas and/or specific performance metrics it wishes to consider in future utility rate proceedings.

V. THE COMMISSION SHOULD REJECT WIEG'S PROPOSED REVENUE ALLOCATION AND ADOPT APPLICANTS' ORIGINALLY FILED ELECTRIC REVENUE ALLOCATION FOR WPSC

a. Half of the range of COSS methods presented in the record include fatal flaws that render them inappropriate for the purposes of determining class revenue allocation.

In translating its final authorized revenue requirement into rates, cost allocation or cost of service studies (COSS) have historically been accepted as a tool to aid in assigning class revenue responsibility and designing utility rates in a manner that reflects the utility's cost to serve its customers. (Direct-CUB-Singletary-r-29-30) In addition to COSS results, the rate design process is commonly guided by the ratemaking principles discussed and set forth by James Bonbright. (Direct-CUB-Singletary-r-29) More than simply a list of oft-cited criteria (Direct-CUB-Singletary-r-26-28), Bonbright calls for consideration of factors such as "fairness or equity," and decries those who would seek to reduce the ratemaking process solely to "economic" or quantitative considerations (Direct-CUB-Singletary-r-27):

the most frequently made use of this self-imposed restriction to "economic" principles is to absolve the economist from any professional concern for considerations of fairness or

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 ²⁹ Bonbright, James C., 1961, *Principles of Public Utility Rates*, New York and London: Columbia University Press p. 31.
 ³⁰ Id.

equity as between investors and consumers, or as among different classes of customers....³¹

Similarly, as the goal of the rate design process is ultimately to set just and reasonable rates, the Supreme Court provides guidance stating that:

The Constitution does not bind rate-making bodies to the service of any single formula or combination of formulas. Agencies to whom this legislative power has been delegated are free, within the ambit of their statutory authority, to make the pragmatic adjustments which may be called for by particular circumstances.³²

This all serves to illustrate the importance of "fairness" and how public policy judgment must play a critical role in the Commission's determination of just and reasonable rates. (Direct-CUB-Singletary-r-28)

As part of its application in this proceeding, Applicants provided the results of their preferred electric, natural gas, and steam COSS models, at the Applicants' requested revenue requirement levels. At the request of Commission staff, Applicants provided the results of its COSS model adjusted to reflect five additional scenarios or method, as well as its preferred COSS, at staff's audited revenue requirement levels. This set of COSS runs requested by staff reflects a range of cost allocation approaches and overall methodologies that capture the historic preferences of parties such as CUB and the Wisconsin Industrial Energy Group (WIEG), as well as other methods that have historically been introduced in proceedings before this Commission. Commission staff also requested that Applicants supplement their preferred natural gas COSS with the COSS B approach commonly presented in Commission rate proceedings, producing the results to COSS A and COSS B. (Direct-CUB-Singletary-r-31)

In considering the results of electric and natural gas COSS models, the Commission has a long-standing practice of relying on the results of one or more COSS when determining class

 $^{^{31}}$ Id

³² Natural Gas Pipeline, supra, 586.

revenue allocation. While the range of electric COSS presented in this proceeding reflect COSS methods that have historically been introduced in proceedings before this Commission, CUB believes it would be inappropriate to blindly consider the results of all COSS presented in this proceeding as valid. Specifically, three of the six COSS contain fatal flaws produced by the application of production cost allocation methods that are inconsistent with utility cost causation, and inconsistent with observable facts, rendering their results invalid. The production plant allocation methods used across the six COSS Methods are summarized below. (Direct-WPSC-Stasik-s-2)

	Method 1	Method 2	Method 3	Method 4	Method 5	Method 6
Classification	Demand	Demand	Demand/	Demand/	Demand/	Demand/
			Energy	Energy	Energy	Energy
D/E Ratio	NA	NA	75/25	75/25	60/40	40/60
Demand Allocator	4-CP	12-CP	4-CP	12-CP	12-CP	12-CP
Non-firm	Net-of-	Net-of-	Net-of-	Net-of-	Interruptible	Interruptible
Allocation	Interruptible	Interruptible	Interruptible	Interruptible	Credit	Credit

Specifically, COSS Methods 1, 2, and 3 include one or both of the following flawed approaches in their preparation: (Direct-WPSC-s-2)

- The use of a demand-only, or 100 percent demand classification for production plant costs (Methods 1 and 2).
- The use of a production demand allocation factor representing an inappropriately narrow range (e.g. 4-CP) of peak demand periods (Methods 1 and 3).

Indeed, Applicants explicitly reject these two allocation methods as inconsistent with the way in which WPSC actually makes its resource planning decisions. (Surrebuttal-CUB-Singletary-r-18-19, Rebuttal-WPSC-Stasik-3-4) Applicants' critiques are consistent with the testimony of CUB's rate design witness. (Direct-CUB-Singletary-r-33-35, 40-43; Surrebuttal-CUB-Singletary-r-18-19). Specifically, the use of a 100 percent demand classification for production plant ignores the

fact that "base and intermediate load power plants were built to provide energy too, so it is appropriate to allocate some portion of those plants' costs to energy rather than demand." (Rebuttal-WPSC-Stasik-3) The classification of electric production plant as 100 percent demand related, as is done in COSS Methods 1 and 2, cannot be reconciled with the fact that we can clearly observe diversity in the resource portfolios of utilities such as WPSC. (Direct-CUB-Singletary-r-33-35) As such, it is clear that WPSC's need to meet *both* peak demand needs as well as the need for low-cost energy drives its resource planning and investment decisions. (*Id.*) Thus COSS Methods 1 and 2 should be disregarded by the Commission. (Rebuttal-CUB-Singletary-r-12-14)

Similarly, Applicants reject the use of a 4-CP demand allocation factor in favor of a 12-CP allocator as "production demand-related costs are incurred to meet system peaks year-round." (Rebuttal-WPSC-Stasik-3) A 12-CP allocator "also reflects the fact that different rate schedules have varying load factors and peak loads." (*Id.*) Moreover, WPSC:

analyzes its generation portfolio's ability to provide energy at all hours to ensure reliable and resilient electric service to all customers. Additionally, combustion turbines may be used in any month of the year, including shoulder months when baseload plants are down for maintenance or other reasons. As a load serving entity, WEPCO [sic] is obligated to plan for capacity in all twelve months of the year, so the 12CP demand allocator is a reasonable basis for allocating generation capacity. [WIEG's] argument *does not appear to appreciate this planning requirement or its relationship to demand allocation. (Id.* at 3-4, emphasis added)

Beyond Applicants own stated resource planning and operational considerations that demonstrate a need to peak capacity needs, i.e. reliability, in all 12 months of the year, the use of a 4-CP allocator is inconsistent with work being done at the Midcontinent Independent System Operator (MISO) to develop new resource capacity accreditation methods, guided by a seasonal or an "all hours matter" approach. (Direct-CUB-Singletary-r-43) A 4-CP production demand allocation factor is inconsistent with MISO's resource adequacy construct on a going-forward

basis, and thus inconsistent with the future MISO market requirements as they relate to resource adequacy. (*Id.*) Thus COSS Methods 1 and 3 should be disregarded by the Commission. (Rebuttal-CUB-Singletary-r-12-14)

The remaining COSS describe a range of reasonableness that is appropriate for consideration by the Commission when determining final revenue allocation and rate design:

- Method 4 75/25 WPSC: Represents Applicants preferred electric COSS for WPSC in this proceeding. (Rebuttal-WPSC-Stasik-3)
- Method 5 12-CP Capacity TOU: WPSC's preferred COSS adjusted to apply the non-firm allocation approach used in Method 6 as well as a demand/energy classification ratio that falls between Method 4 and Method 6. (Direct-WPSC-Stasik-s-2
- Method 6 12-CP Capacity Basic Customer: Represents CUB's preferred COSS.
 (Direct-CUB-Singletary-r-35)

The results of these three COSS at Commission staff's audited revenue requirement level are summarized in the table below. (Rebuttal-CUB-Singletary-11)

Customer Classes	75/25 WPSC	12-CP Capacity TOU	12-CP Capacity Basic Customer
Residential Flat (Rg-1)	11.6%	9.0%	4.5%
Residential TOU (Rg-3OTOU)	13.0%	10.5%	10.7%
Residential TOU (Rg-5OTOU, Rg-RR)	12.7%	9.9%	7.9%
Secondary Flat (Cg-1)	9.2%	7.7%	14.0%
Sec. Demand (Cg-3OTOU)	6.5%	4.3%	7.1%
Sec. Demand TOU (Cg-5)	7.2%	3.3%	12.2%
Sec. Demand (Cg-20)	11.7%	9.3%	10.7%
Primary (Cp-1)	5.8%	13.1%	15.3%
Lighting	-17.0%	-18.0%	-15.7%
EV-Res	60.3%	60.3%	-20.1%
EV-Com	15.2%	15.2%	5.0%
Wisconsin Totals	9.5%	9.5%	9.5%

b. WIEG's proposed revenue allocation in this proceeding is based on analytically flawed COSS results and should be disregarded.

WIEG indicates that it supports COSS Method 1, 4-CP (Direct-WIEG-Maini-r-14), and that the results of this COSS were used as guide by WIEG's witness in preparing its proposed electric revenue allocation "directionally consistent with these results." (*Id.*) As already discussed, COSS Method 1 suffers from twin fatal flaws, rendering their results inappropriate for the purposes of determining class revenue allocation. (Rebuttal-CUB-Singletary-19) WIEG's electric revenue allocation should be disregarded.

c. Because restrictions on Commission staff prevent the application of judgement in the development of Commission staff's proposed electric revenue allocation, staff's proposed revenue allocation should not be used to evaluate the reasonableness of any one revenue allocation proposal.

It is well-established that the process of developing just and reasonable rates, from cost allocation all the way down through the development of tariffed rates, requires judgment—on the part of the Commission as well as rate analysts. (Rebuttal-CUB-Singletary-13-14) Due to constraints currently placed on Commission rate analyst staff, the use of informed judgement is not, and indeed cannot, be reflected in Mr. Meulemans' revenue allocation proposal. Staff's revenue allocation proposal should be viewed within those constraints. (Rebuttal-CUB-Singletary-7-8) Additionally, as staff is currently precluded from arriving at any conclusion regarding the methods used in any one COSS or another, no conclusions regarding the strengths or weakness of any one COSS should be drawn from staff's testimony or revenue allocation proposal. (*Id.*)

d. WPSC's originally proposed electric revenue allocation is supported by the range of reasonable COSS results when considered alongside other factors.

Applicants' initially filed electric revenue allocation proposal for WPSC reflects an explicit policy decision on the part of management to provide rate relief to residential customers

within the setting of the large overall increase being sought by the Applicant. (Surrebuttal-CUB-Singletary-r-21-22, Tr. 114) The Applicant filed its rate application in this proceeding on April 28, 2022. This initial filing included exhibits and testimony regarding overall revenue requirements, but not rates. (Surrebuttal-CUB-Singletary-r-22) The same day that WPSC initial application was filed, the Company issued a press release wherein it stated its intention that: "The plan submitted for consideration would increase the typical electric bill for residential customers by approximately \$5 to \$6 a month in 2023, or roughly 5 to 6%." (*Id.*, Ex-CUB-Singletary-6) The proposed revenue allocation ultimately filed for WPSC aligned with this stated intent, reflecting a 5.89 percent increase for residential electric customers, approximately equal to \$5.96 per month, (Ex.-WPSC-Nelson-2, Ex.-WPSC-Nelson-3) and with the bill insert sent to Applicants customers beginning July 29, 2022 (Ex.-WPSC-Nelson-7) Applicants knowingly made this proposal in spite of the fact it is directionally inconsistent with Applicants' preferred electric COSS. (*Id.*, Surrebuttal-CUB-Singletary-r-22, Ex.-WPSC-Nelson-2, Ex.-WPSC Stasik-7 Schedule 1)

These facts demonstrate that Applicants made an explicit policy decision, one that CUB supports, to provide rate relief to WPSC's residential electric customers during this period when many utility customers are suffering from economic distress due to the extraordinary cost pressures in the economy, even if that decision did not conform to Applicants preferred COSS approach. (Surrebuttal-CUB-Singletary-r-22) While Applicants' originally filed revenue allocation deviates from its preferred COSS, it is directionally consistent with CUB's preferred COSS. (Rebuttal-CUB-Singletary-16) Applicants original electric revenue allocation proposal is also consistent with the just and reasonable rate standard, which requires judgement. 33 Moreover,

³³ See, e.g., Hope, supra; Farmers Union Cent. Exchange, supra; Permian Basin, supra; Mobil Oil Corps, supra.

Applicants' original electric revenue allocation proposal is consistent with the Commission's accepted framework for class revenue allocation:

It is reasonable to continue to rely on the results of a number of electric cost-of-service studies (COSS) along with other factors, such as bill impacts, when allocating revenue responsibility among the various customer classes.³⁴

e. WPSC has offered no explanation as to why it now supports a different revenue allocation proposal.

Despite its clearly stated intent, both in the press and directly to customers, to limit the test year residential electric rate increase, Applicants abandoned its revenue allocation proposal at the first available opportunity. (Rebuttal-WPSC-Nelson-2-3) Applicants then doubled-down at the hearing, explicitly coming out in favor of the revenue allocation proposed by the large industrial customer advocate (Tr. 141, Surrebuttal-WPSC-Nelson-2) at the expense of residential customers. (Surrebuttal-CUB-Singletary-r-23) A review of the record reveals that Applicants have not offered any defense of its originally filed revenue allocation. Moreover, the only explanation offered as to why it now supports WIEG's electric revenue allocation proposal was offered by Applicant witness Nelson. In his surrebuttal he confusingly states:

After reviewing the direct testimony of Staff witness Mr. Meulemans and WIEG witness Ms. Maini, and considering the worsening economic conditions since Wisconsin Electric filed its Application on April 28th, Wisconsin Electric supports the electric revenue allocation proposed by Ms. Maini. Wisconsin Electric recommends the Commission adopt Ms. Maini's proposed allocation, which closely tracks Staff witness Mr. Meulemans' recommended electric revenue allocation, for developing electric rates. My filed electric revenue allocation departed from our traditional COSS and—if adopted—would produce lower revenue allocations to residential customer classes at the expense of other classes, resulting in unsupported higher-than-appropriate rate increases for those classes. (Surrebuttal-WPSC-Nelson-2)

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³⁴ In re Joint Application of Wisconsin Electric Power Company and Wisconsin Gas LLC for Authority to Adjust Electric, Natural Gas, and Steam Rates, Docket 5-UR-109 Final Decision at 14 (December 19, 2019) (PSC REF#: 381305).

Mr. Nelson's attempt at an explanation is concerning. His statement that his "filed electric revenue allocation departed from [Applicants'] traditional COSS and—if adopted—would produce lower revenue allocations to residential customer classes at the expense of other classes..." implies that his initially filed revenue allocation was somehow in error – that limiting the rate increase to residential customers was a "bug" rather than a feature. This runs counter to the evidence in this proceeding demonstrating that Applicants made an explicit decision to limit the rate increase to residential customers, long before Mr. Nelson's testimony was filed.

Moreover, this runs counter to Mr. Nelson's own direct testimony wherein he states that

WPSC is proposing to move towards the results of [Applicant's preferred] COSS while balancing other rate design considerations, including rate stability and gradualism. Consistent with WPSC's approach in past rate cases, the COSS results were used as the starting point for the rate design process. (Direct-WPSC-Nelson-r-8)

Here he seems to suggest that he *did* develop his initial revenue allocation proposal based on the company's preferred COSS. However, as previously noted this is also contradicted by the fact that Mr. Nelson's initial revenue allocation runs directionally *counter* to Applicants' preferred electric COSS for many customer classes.

	Method 4	WPSC
		Proposed
	75/25	Revenue
Customer Classes	WPSC	Allocation
Residential Flat (Rg-1)	11.6%	5.89%
Residential TOU (Rg-3OTOU)	13.0%	7.66%
Residential TOU (Rg-5OTOU, Rg-RR)	12.7%	5.93%
Secondary Flat (Cg-1)	9.2%	6.46%
Sec. Demand (Cg-3OTOU)	6.5%	8.91%
Sec. Demand TOU (Cg-5)	7.2%	9.16%
Sec. Demand (Cg-20)	11.7%	8.74%
Primary (Cp-1)	5.8%	6.33%
Lighting	-17.0%	0.16%
EV-Res	60.3%	8.72%
EV-Com	15.2%	-3.25%
Wisconsin Totals	9.5%	6.77%

Which is it? Was Mr. Nelson guided by Applicants' preferred COSS when preparing his initial revenue allocation? If so, his proposal is inconsistent with the company's preferred COSS. If not, then it would have to be true that other factors, such as explicitly seeking to limit the increase to residential customers, would have to have come into play. This latter scenario is supported by the record evidence. However, if this scenario is true, why has the company retreated from its initial revenue allocation proposal. Indeed the "worsening economic conditions since Wisconsin Electric filed its Application on April 28th" (Surrebuttal-WPSC-Nelson-2) would provide greater support for providing rate relief to WPSC's nearly 400 thousand residential electric customers via revenue allocation.

VI. THE COMMISSION SHOULD ADOPT WPSC'S PROPOSED ELECTRIC RATE DESIGN

WPSC's currently authorized facilities charge (customer charge) rates are equivalent to \$21/month for residential customers, and General Secondary Service customers. (Ex.-WPSC-Nelson-1, Page 1) A review of the COSS results in this proceeding reveals the following functionalized customer cost for the residential and secondary voltage flat rate customer classes. (Direct-CUB-Singletary-r-56)

	(\$/customer/day)		(9	(\$/customer/month)		
Method	Res. Flat	Sec. Flat	R	Res. Flat	Sec. Flat	
1-5	1.0221	1.1810	3	1.09	35.92	
6	0.5331	0.6117	1	6.22	18.61	

As previously noted, the Commission has a long-standing practice of considering the results of multiple COSS when setting retail rates. CUB recommends that the Commission lower WPSC's authorized electric customer charge to \$17/month. (*Id.* at 56-57) This would fall within

the range of COSS results in this proceeding (*id.*) and would be consistent with the *Proposed*Settlement. It would also bring WPSC's electric rates closer to the monthly customer charges authorized for Madison Gas and Electric Company, Northern States Power Company-Wisconsin, and Wisconsin Power and Light Company. (*Id.*)

VII. THE COMMISSION SHOULD ADOPT COMMISSION STAFF'S PROPOSED NATURAL GAS REVENUE ALLOCATION FOR WPSC

As previously noted, the Commission has a long-standing practice of considering the results of multiple COSS when assigning class revenue responsibility. As compared to electric cost allocation, this process is greatly simplified for natural gas as there are only two embedded COSS presented for each gas utility. (*Id.* at 58) CUB prefers that WPSC's final natural gas revenue allocation closely resemble the results of COSS B, as this study is consistent with CUB's preferences regarding utility cost allocation. (*Id.*) Therefore COSS B reflects a more reasonable approach to natural gas cost allocation. However, in light of Commission past practices, CUB recommends that the Commission allocate WPSC's natural gas revenue requirement so as to better reflect the range of COSS results. Specifically, CUB supports Commission staff's proposed revenue allocations for WPSC, as this better reflects a balance between the two COSS results. (Rebuttal-CUB-Singletary-17-18)

VIII. CONCLUSION

For the foregoing reasons and based on the record of evidence in this proceeding, CUB recommends that the Commission:

Find that an ROE of 9.0 or 9.1 is just and reasonable in that it balances the needs

of Wisconsin customers with those of Company investors and is consistent with

the public interest in safe, reliable, affordable public utility service;

o Adopt a set of quantitative approaches to estimating the utility cost of

equity consistent with conventional corporate finance principles;

o Consider Applicants' performance in arriving at an authorized ROE and

include a discussion of this consideration in its final decision;

Reject WIEG's proposed electric revenue allocation and instead adopt

Applicants' originally-proposed electric revenue allocation, which prioritizes

reasonable rates for thousands of residential customers consistent with Company-

stated goals, widely-accepted ratemaking principles, and the public interest;

Adopt WPSC's proposed electric rate design; and

Adopt Commission staff's proposed natural gas revenue allocation for WPSC.

Dated this day, October 13, 2022.

Respectfully Submitted,

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